

ANOTHER SMALL CONTRIBUTION TO AFRICAN ORNITHOLOGY.

BY ERNST HARTERT.

THE following article is based on collections made by Dr. W. J. Ansorge during his third stay in the African Continent. A list of the birds collected during his second stay in Africa is given by me in the Appendix to Dr. Ansorge's book "Under the African Sun," to which I have sometimes to refer in the following pages. Occasionally birds from other collections, specially some collected by Dr. Felix Roth at Warri, in the Niger Coast Protectorate, have been discussed.

Dr. Ansorge has this time crossed Africa from east to west, taking from Uganda about the same route as Mr. A. B. Lloyd. Most of the localities mentioned are therefore to be found in Lloyd's book "In Dwarf Land and Cannibal Country" (London, J. Fisher Unwin, 1899).

From Mombasa Dr. Ansorge travelled to Uganda, collecting very interesting birds in the sandy plain of the Athi River and at Nairobi. From Uganda proper he marched westwards to Toro (or Toru, as Ansorge spells it), where a good number of birds were procured. Toro is the country east of Mount Ruwenzori, and a description and a map, showing some of the places where Ansorge collected, is given in Lloyd's book, p. 159. At Fort George, on Lake Albert Edward, the collector seems to have stayed for some time, then proceeded to "Karimia in Ussongora,* Congo Free State," hence northwards to Fort Mbéni, or Béné, on the lower course of the Semliki, or, as it is here called, Kakibi River; then, entering the "Great African Forest," *i.e.*, the enormous primeval forest, inhabited by a Pygmy race, he travelled in a north-westerly direction to the Ituri River, which at its lower portion is called the Aruwimi, and sailing down the Aruwimi and Congo, reached the west coast, where he found a Belgian steamer ready to sail. He thus accomplished the journey in the marvellously short time of seventy-nine days from Fort George to London. The collections that could be made on such a record journey are of course very fragmentary, but they contain some highly interesting specimens. A box with probably some very good birds from East Africa is unfortunately lost, and has not been traced. A longer stay in the Great Forest would doubtlessly have yielded many wonderful things. On pp. 299—302 Mr. Lloyd has given some notes on the "animal life in the forest," but he is not a naturalist, and his description cannot be accurate, since "many species of gazelles, chimpanzee and gorilla" do not live there, or have not yet been identified, and we do not believe in hyaenas in the middle of the forest, although Mr. Lloyd mentions "leopards, panthers, wild cats, civets, hyaenas, and reptiles."

Of bird-life in the Great Forest Mr. Lloyd says: "Birds of every description and varied hue abound, parrots undoubtedly predominating, paraquets, swifts, owls, guinea-fowl, kingfishers, fish eagles, divers, kites, hornbills in great variety; pigeons, doves, honey-birds, and all kinds of night-birds. In the daytime it is delightful to sit and listen to the singing of the birds, their songs being so different from the bird-songs of Europe; some with deep musical sounds like the tolling of a

* Spelt Ussogara by Dr. Ansorge, but on the maps I find Ussongora. This place must of course not be mistaken for the country of Usagara, in German East Africa. Ansorge's Karimia is the Karimi on the Isango, a continuation of the Semliki-Kakibi River, on Mr. Lloyd's and other maps.

bell. The black-and-white wagtail is so tame that he will sit within a few yards and pour forth his beautiful notes. The tiny honey-bird darts here, there, and everywhere, like streaks of light, issuing forth its twit, twit, as it lights upon some honey-bedewed blossom. Overhead the ungainly hornbill ploughs its way above the tree-tops, calling to its mate, and the screaming of the parrots as in great flocks they make their flight along the river banks, or through the tangled mass of vegetation overhead, is almost deafening. By the little streams are countless numbers of wonderful butterflies, some as large as swifts, and all (*sic*!) most gorgeously coloured. The insect life baffles description. . . .” Exaggerated as this statement may perhaps be, it is of interest to hear it, since it seems to contradict the reports of the scarcity of bird-life in the Great Forest.

The birds collected by Dr. Ansorge belong to three more or less faunistically different countries. In the Athi Plain and at Nairobi he collected in the southern parts of the North-East African desert and steppe fauna, which reaches south at least to Masailand (cf. *Drepanoplectes jacksoni*, *Mirafra africana athi*, *Passer diffusus gongonensis* and others); then the so-called East African fauna was touched; while soon afterwards, without a very sharp line of demarkation, the West African area was entered (cf. *Corythæca cristata*, *Columba unicincta*, and many others).

It may here be remarked that at present a general account of the birds of Africa is one of the greatest, if not the greatest, desideratum of ornithologists. The publications on African birds are so numerous, and especially in small contributions—often descriptions of one or two species or subspecies—and nearly all nations, as German, British, French, Swedish, Portuguese, Italian, American, Austrian, partake of the ornithological work in Africa, that it is most difficult, I think more difficult than in any other country, to be informed about all the literature. It is therefore to be hoped that the works of Professor Reichenow and Captain Shelley will soon appear.*

I am obliged to my friends Professor Reichenow, Dr. Sharpe, and Mr. Grant for comparing some of the specimens with the types and other examples in their collections, and thank them for their kindness.

1. *Phalacrocorax africanus* (Gm.)

♂ ♀. Ituri River, twenty-second day from Fort Mbéni, 26. 5. 1899.

“Iris golden-brown. Feet black. Upper jaw dark grey with yellow edge, lower yellow.”

2. *Podiceps cristatus* L.

Lake Varangot, Fort Gerry, Torn, 13. 4. 1899.

3. *Nettapus auritus* (Bodd.)

♀ ad. Near Ripon Falls, Somerset Nile, 10. 3. 1899.

“Iris dark brown. Feet greenish black. Upper bill greenish grey with a greenish yellow patch on each side near the base. Lower bill pinkish grey with orange-yellow skin between rami.”

4. *Nettion capense* (Gm.)

♀ ad. Lake Varangot, Torn, Uganda Protectorate, 16. 4. 1899.

“Iris dark brown. Feet slate-blue; bill slate-blue with dark central greenish grey streak.”

* While this passed through the press Part 1. of Vol. II. of Shelley's work has actually been issued.

5. *Oedicnemus vermiculatus* Cab.

♀ ad. Fort George, Lake Albert Edward, Torn, 26. 4. 1899.

6. *Hoplopterus spinosus* (L.)

♂ ♀. Fort George, Lake Albert; Edward, 26. 4. 1899, ♀, Salt lake Kikorongo, one day's march from Lake Albert Edward, 25. 4. 1899.

"Iris blood-red ; bill and feet black."

7. *Chettusia melanoptera* (Cretzschm.)

♂ ♀. Nairobi, British East Africa, 28. 1. 1899.

"Iris lemon-yellow ; red ring of bare skin round eyes, more developed in the male. Feet brownish-red, lighter on the thighs. Bill black."

8. *Chettusia inornata* (Swains.)

♀ ad. Lake Kikorongo, salt lake one day's march from Lake Albert Edward 25. 4. 1899.

"Iris lemon-yellow, inwardly shaded with greenish ; bill and feet black."

9. *Ochthodromus asiaticus* (Pall.)

♀ ♀. Athi Plain, British East Africa, 25. 1. 1899.

One of these shows beginning of moult on chest, the other not.

10. *Glareola pratincola* (L.)

Five males, Salt lake Kikorongo, Torn, 25. 4. 1899.

Only one has the throat quite unspotted, and in that specimen it is rather deep rusty buff. It would be interesting to investigate whether the Pratincole is really, as it is supposed to be, merely a migrant in Africa, or if a special darker race is resident in the Dark Continent.

11. *Galachrysea nuchalis* (Gray).

♂ ad. Enguatnara on the Ituri River, 31. 5. 1899.

"Iris dark brown. Feet copper red. Bill black with red base." This bird has the inner (not outer) webs of the secondaries white at base, its wing measures 6 inches ! Cf. *Cat. B. Brit. Mus.*, v. XXIV. p. 64. Is *G. emini* a different species ?

12. *Otis melanogaster* Rüpp.

♂ ad. Nakabimba in Toru, Uganda Protectorate, 2. 4. 1899. "Iris brown ; feet yellowish grey, becoming brownish grey below the knee, dark grey on the toes, especially the middle one. Bill : upper jaw dark grey with yellowish grey edges, lower yellowish grey."

13. *Fulica cristata* Gm.

Lake Varangot (Toru), Uganda Protectorate, 16. 4. 1899. "Iris blood-red ; feet slate-colour, darker on the joints and orange-red patches above the knees. Bill pale grey with a bluish tinge. Bare patch on forehead greyish white, terminating in two dark brown-red protuberances with orange-red tips."

14. *Gallinula chloropus* (L.)

♂ ♀. in nuptial plumage, Lake Varangot in Torn, Uganda Protectorate,
13. 4. 1899.

15. *Limnocorax niger* (Gm.)

♂. Lake Varangot, Torn, 13. 4. 1899.

16. *Pterocles exustus* Temm.

♂ ♀. Campi-ya-Simba, British East Africa, 14. 1. 1899. "In both sexes iris dark brown : feet bluish grey ; bill greyish white."

Temminck described his *P. exustus* from West Africa and North-East Africa. The African Birds were therefore the "typical" ones, which means that they must be called *P. exustus exustus*, if subspecies are distinguished, and there is no doubt, in my opinion, that this can be done.

I have not been able to compare a series of Abyssinian skins, but as several writers have declared that they are like those from North-Eastern Africa, and in view of the close relationship of the fauna of North-Eastern Africa and Senegambia, I must take their similarity for granted at present. The North-East African birds (Abyssinia, Egypt) and those from Eastern Tropical Africa (Kilimanjaro, Machakos, Campi-ya-Simba) do not seem to differ and are above rather dark olive-brown, while the greater wing-coverts are much more yellow, especially on the tips. This is evidently pigment, and not at all due to staining. Bogdanow's name *P. ellioti* (*Bull. Ac. Sci. Petersb.* v. XXVII., p. 167, 1881) is based on one (!) Abyssinian example collected nearly seventy years ago by Rüppell. The differences he mentions are evidently due to the faded condition of this old veteran of a mounted specimen, and the white patch he describes is found in all adult males. *P. ellioti* is therefore, for the present, to be regarded as a synonym of *P. exustus*.

The wing of Central African adult *males* measures about 185 mm.

From this form differs the bird inhabiting the deserts of Somaliland, in being smaller, paler and more sandy isabelline on the upperside, chest and breast. The under tail-coverts in the one *male* at Tring are unspotted. The *female* is less thickly spotted on the foreneck, less blackish and more reddish on the upperside. The wings of two adult *males* and two *females* measure about 170 mm. This form might be termed

Pterocles exustus somalicus subsp. nov. (Type Donaldson Smith coll. Milmil,
30. 7. 1894.)

A third distinct form is the Indian bird, which is lighter above than *P. exustus exustus*, not so dark olive-brown, but not so bright yellowish isabelline as *P. exustus somalicus*. The larger wing-coverts are paler and not so yellowish. The *females* show the same differences. This form might be named

P. exustus orientalis subsp. nov.

We have thus, for the present :—

P. exustus exustus : West and N.E. Africa generally, south to the Masai-steppes, Kilimanjaro and Arusha.

P. exustus somalicus : Somaliland.

P. exustus orientalis : India.

17. *Pterocles gutturalis saturation* subsp. nov.

(Type : Campi-ya-Simba, British E. Africa, 23. 4. 1898.)

♀ ♀. Athi Plain, British East Africa, 24. 1. 1899. " Iris chocolate-brown; feet bluish grey; bill bluish grey."

Males of *P. gutturalis* from British East Africa, the Kilimanjaro district and Bogosland have the rust-coloured extremities to the greater series of wing-coverts of a much deeper rufous colour, while those from Transvaal, Nyassaland and the Zambesi have them paler and somewhat more yellowish. The back and rump in the northern birds is also darker brown than in those from Southern Africa. The southern form being first described, the northern one requires a new subspecific name : *P. gutturalis saturation*.

The females of the two forms are perhaps not distinguishable, unless those of *P. gutturalis saturation* are more blackish above.

18. *Hagedashia hagedash* (Lath.)

♀. Bomili on the Ituri River, Congo Free State, 30. 5. 1899. " Iris blood-red; feet black with brick-red down the front of the toes and lower half of metatarsus; bill black with reddish brown tip, basal half of culmen bright red."

I think that the colour of the iris is given wrong, probably, the blood having broken out into the eyes, for the Hagedash has not red eyes.

I am inclined to believe that there are two subspecies of Hagedash, birds from N.E. and Eastern Africa being smaller and paler than those from the West African region, which have longer bills and darker breasts. Our material, however, is not sufficient to settle this question.

19. *Phoyx purpurea* (L.)

♀. Yanga on the Ituri River, Congo Free State, 29. 5. 1899. " Iris lemon yellow."

20. *Bubulcus ibis* (L.)

♀ ad., twentieth day from Fort Béni in Great African Forest, 24. 5. 1899. " Iris lemon yellow; bill lemon yellow."

21. *Columba unicincta* Cass.

An adult ♀ of this rare pigeon was shot at Diapanda, a Suaheli settlement in the Great African Forest, on the sixth day's march from Fort Béni. " The iris is blood-red; feet slate-blue; bill slaty blue, with paler tip; each eyelid with narrow crimson ring, followed by a fleshy brown area, and finally a crimson outer patch."

Columba unicincta is described from Gaboon (Agobai), and recorded also from Liberia by Büttikofer, who figured it in the Notes of the Leyden Museum v. VII. pl. 6. The specimen from the Great African Forest agrees perfectly with the original description as well as with Büttikofer's figure.

Dr. Ansorge says these pigeons are very shy and difficult to approach.

22. *Turtur semitorquatus* (Rüpp.).

Nairobi, 5. 2. 1899.

23. *Chalcopelia afra* (L.).

Dwangiri (Singo), Uganda, 28. 3. 1899.

24. *Tympanistria tympanistria* (Temm.).

♂ ♀ Kikanja, Torn, 3. 4. 1899. "Iris brown ; feet purple-red ; bill black with purple tinge ; gape purple-red."

These specimens are darker on the back and smaller (wing ♂ 115, ♀ 110) than South African examples. There are probably two races.

25. *Vinago calva nudirostris* (Swains.).

Kichuchu, Torn, 5. 4. 1899.

26. *Pternistes cranchi* (Leach).

Specimens of both sexes from the Mokia River in Toru agree perfectly with typical *P. cranchi*. Young birds have a good deal of white on the abdomen. An adult *male* from Ngombe on the Congo has the rufous-brown edges to the feathers of the abdomen deeper rufous, but both Professor Reichenow and Mr. Grant are of opinion that this is not a subspecific character.

27. *Numida reichenowi* Grant.

♂ ad. Campi-ya-Simba, British East Africa, 13. 1. 1898. "Iris dark grey ; feet black ; upper jaw of bill dark grey-brown, lower bluish grey ; wattles blood-red, and a patch of similar colour on lower bill near the base, extending round the nostrils and over two-thirds of the helmet ; sides of throat bright blue, with black mottlings over the throat and neck."

28. *Numida ptilorhyncha* Licht.

♀ Nakabinba, Torn, 2. 4. 1899. "Iris golden brown ; feet pale chocolate, brown scaling in front ; upper jaw red-brown, lower yellowish brown ; upper rim of nostrils, and a double caruncular ridge between them, orange-red ; skin of chin and throat pale lilac ; the blue wattles have no speck of red ; skin round eyes lilac-black."

♀ Mokia River, Toru, 24. 4. 1899. "Iris dark brown ; feet dark brown ; bill reddish brown, but horn-grey towards tip ; wattles very pale blue ; two whitish blue spots on upper eyelid ; all the blue marks are whitish blue or white ; throat greyish black ; neck black ; no red spot on wattles ; bristly wart between nostrils reddish brown."

♂ ♀ Holulu River, tributary of Semliki River, Congo Free State, 6. 5. 1899. "Iris dark brown ; feet chocolate brown ; upper jaw dull red-brown near base, rest of bill dull greenish grey ; the blue markings are a mottling of dark and light blue ; wattles with a dark edge."

All these specimens have very short bristly tufts between the nostrils, and in the last-mentioned ♀ these tufts are entirely absent, although it doubtless belongs to this species. Probably all these Central African birds belong to an unnamed subspecies. O. Neumann has separated several races of *N. ptilorhyncha*, but it must be said that Jesse's Abyssinian skins in the British Museum do not bear out Neumann's character of the long tufts in the Abyssinian form, as they have the bristly bunches rather short. The markings on the outer webs of the primaries seem to vary considerably.

29. **Buteo augur** Rüpp.

♂♂ ad. Fort Gerry and Lake Varangot (1½ hour from Fort Gerry), Toru, Uganda Protectorate, 12. and 13. 4. 1899. "Iris dark brown; feet lemon-yellow; cere lemon-yellow; bill dark grey with bluish tinge near base of mandible; skin round eyes greenish yellow."

30. **Milvus aegyptius** (Gm.).

♂ ad. Nairobi, British East Africa, 2. 2. 1899. "Bill lemon yellow."

31. **Falco cuvieri** Smith.

♂ ad. Nairobi, 31. 1. 1899. "Iris dark brown; feet and cere lemon-yellow; bill dark grey, shading off into greenish grey near base."

32. **Poeocephalus aubryanus** Soudancé.

♀ ad. Sakarumbi, one day from Fort Mbéni, Congo Free State, 5. 5. 1899. "Iris orange; feet covered with small black scales with white edges; upper jaw of bill horn-grey with black tip, lower black."

33. **Turacus hartlaubi** (Fischer & Reichen.)

♂ ad. Nairobi, British East Africa, 5. 2. 1899. "Iris dark brown; feet blue-black; bill reddish brown."

34. **Corythaeola cristata** (Vieill.).

♀. Great African Forest, twentieth day from Fort Mbéni.

35. **Colius leucotis berlepschi** Hart.

Specimens from Fort George on Lake Albert Edward and Kitagwetoa in Toru (April), as well as from Buaia (Bnsori), Uganda (March 1899), are all referable to *C. l. berlepschi*, as separated from *C. leucotis leucotis* and *C. l. affinis* in Appendix p. 333 to Ansorge's "Under the African Sun" (London, 1899).

36. **Coccytes afer** (Licht.).

♂ ♀. Karimia, Ussongora, Congo Free State, 1. 5. 1899. A uniform blue egg, cut out of the female's body, measures 26 by 20.5 mm.

37. *Centropus superciliosus* (Hempr. & Ehrb.).

♂. Karimia, Ussongora, 1. 5. 1899. "Iris blood-red."

38. *Chrysococcyx cupreus* (Bodd.) ?!

An evidently young ♀ was shot on the second day's march from Fort Mbéni. "Its iris was pinkish-brown; the feet yellowish-green; bill black." It differs from young of *C. cupreus* in the very narrow barring of the underside, each feather having four or five distinct pale whitish buff and bronzy green bars. I am inclined to think that this bird is the young of an undescribed form of *Chrysococcyx* nearest to *cupreus*.

39. *Indicator indicator* (Gm.).

Wemi River, Torn, 21. 4. 1899. "Iris ochre. The song of this bird is a constant 'wit-purr, wit-purr.'"

40. *Tricholaema lachrymosum* Cab.

♂ ad. Kitagweto (Torn), 6. 4. 1899. "Iris orange-gold; feet greenish grey; bill black." The spots on the sides of this *male* are round, not ovate as in the *female* recorded from Masongoleni in British East Africa (Ansorge's "Under the African Sun," p. 335).

41. *Melanobucco bidentatus aequatorialis* Shell.

♀ ad. Kichuchu, Torn, 5. 4. 1899. "Iris brown, bare; skin around the eyes greenish yellow."

42. *Barbatula subsulphurea* (Fras.).

♀. Kitima, Government station on the Ituri River, twenty-first day's march in Great African Forest from Fort Béni. "Iris brown; feet deep grey; bill black."

43. *Melanobucco leucocephalus* (Defil.).

♂ ad. Kikanja, Torn, 3. 4. 1899. "Iris brown."

44. *Iynx pectoralis* Vig.

Nairobi, British East Africa, 5. 2. and 27. 1. 1899.

45. *Thripias namaquus* (Licht.) (? an snbsp.).

A *male* from Ussongora, collected 17. 11. 1889 by Emin Pasha, has the wing longer than four South African *males*. The wing in the Ussongora bird is fully 5.5 in. long. In the *Cat. B. Brit. Mus.* v. XVIII. p. 307, 5.2 is given as the length of the wing, those before me measure 5.2 to 5.3 inches. The bars on the underside seem also to be narrower in the Ussongora bird.

46. *Thripias namaquus schoensis* (Rüpp.).

A *female* shot at Nairobi, 3. 1. 1899 by Dr. Ansorge. "Iris blood-red ; feet and bill greenish grey."

47. *Dendropicus poecilolaemus* Rehw.

♀. Kinyomozi (Torn), 4. 4. 1899. "Iris red-brown ; feet greenish-grey ; bill greenish slate."

48. *Dendropicus tropicalis* Rehw.

♀. Kichuehu (Torn), 5. 4. 1899. "Iris red." ♀ Ngombe, Congo, August Bohndorff coll.

49. *Dendromus permistus* Rehw.

♂ ♀ jnv. Sakarumbi, one day's march from Fort Béni, 5. 5. 1899. "Iris dark brown ; feet pale green ; bill grey with greenish blue tinge."

50. *Iyngipicus obsoletus ingens* subsp. nov.

One adult *male* from Nairobi differs from specimens from Senegambia and Gambaga in being considerably larger and darker brown. Not having specimens from N.E. Africa for comparison, I sent the bird to Prof. Reichenow, who kindly writes : "Das Exemplar ist wesentlich dunkler im Ton der brannen Gefiederfärbung, als Stücke von Nordostafrika, auch grösser." Therefore, although I am not generally inclined to describe subspecies from the evidence of single specimens, I do not hesitate to separate this gigantic specimen under the name of *ingens*. The measurements of the type are : wing 90 mm. (3.55 inches) ; tail 46 ; metatarsus 14 ; culmen 21 mm. "The iris is red-brown, feet greenish grey ; bill slate grey."

51. *Coracias caudatus* L.

♂. Nairobi, British East Africa, 2. 2. 1899. Outer rectrices sprouting.

52. *Eurystomus afer* (Lath.).

♂ ad. Kilgirma (Buekulla), Uganda, 29. 3. 1899.

53. *Eurystomus gularis* (Vieill.).

♀ ad. Kitima, Government station on the Ituri River, twenty-first day from Fort Béni in Great African Forest.

54. *Lophoceros erythrorhynchus* (Temm.).

♂ ad. Kinani, British East Africa, 2. 5. 1898. "Iris light yellow."

55. *Lophoceros melanoleucus* (Licht.).

♂ ad. Kibwezi, Ukamba, British East Africa, 28. 4. 1898. "Iris whitish yellow ; feet black ; bill red."

56. *Lophocerus fasciatus* (Shaw).

Tambue, Government station on the Ituri River, twenty-second day from Fort Béni, in Great African Forest. "Iris dark brown; feet purplish black; bill straw-yellow, with deep red tip, line on upper jaw and under surface of lower jaw." This specimen is marked ♂, but according to the *Catalogue of Birds* it is a ♀.

57. *Halcyon chelicuti* (Stanley).

Kaboa (Buekulla), Uganda and Holulu River (tributary to the Semliki), Congo Free State.

Glancing over our series of *H. chelicuti*, it seems to be evident that South African Birds (Transvaal and Natal) are larger and have longer bills, while being generally somewhat paler. Their wings measure 82, 84, 85, 86, 87, 87 mm. Specimens from Senegambia and Somaliland are much smaller, the wings measuring only 76, 76, 79, 80 mm., and their bills are smaller. The former would be *H. chelicuti damarensis* Strickl., the latter *H. chelicuti chelicuti* (Stanl.) 1834. The difficulty in separating these two forms is presented by the examples from Tropical Africa, West Africa to East Africa, which are intermediate, their wings measuring 75, 76, 78, 80, 80, 81, 82, 83, 83, 84, 85 mm., but they have always much smaller bills. Thus it would seem, that all the forms from North-East Africa and Senegambia to about the Zambesi cannot be separated at present, those from South Africa, however, being *N. chelicuti damarensis*.

58. *Alcedo quadribrachys guentheri* Sharpe.

♂. Panga, on the Aruwimi River, l. 6. 1899. "Iris dark brown; bill black; feet coral red." This form, although easily distinguishable from true *quadribrachys*, can hardly be looked upon more than a subspecies of the latter, being only smaller and of a lighter green on the back, which is more like cobalt.

59. *Merops persicus* Pull.

♀ ad. Kasesi (Torn), 22. 4. 1899.

60. *Merops apiaster* L.

Nakabinba (Torn), 2. 4. 1899.

61. *Melittophagus gularis australis* Rehw.

♀ ad. Kitima, Government station on the Ituri River, twenty-first day from Fort Béni, in Great African Forest, 25. 5. 1899. "Iris blood-red, feet dark purple-black; bill black."

This specimen agrees in every respect with another Congo skin, and both differ from twenty skins from Liberia, Sierra Leone, and Gold Coast in the following characters:—

There are less blue feathers on the forehead. The superciliary pale cobalt-blue superciliary streak is quite indistinct, and no trace of it is continued beyond the eyes. The cobalt-blue longitudinal spots on the breast are smaller, and the blue on the rump is generally darker.

M. gularis australis is therefore a very distinct subspecies. (Cf. *Journ. f. Orn.* 1885, p. 222; *Cat. B. Brit. Mus.*, v. XVII. p. 51.)

62. *Melittophagus cyanostictus* (Cab.).

Mubende (Bucknulla), Uganda, Nakabimba (Torn) and Fort George on Lake Albert Edward.

This Bee-eater has been somewhat unfortunate with regard to its name. Cabanis first described it under the name of *Merops cyanostictus*, as a doubtful variety of "*Merops erythropterus*" in 1869 in v. d. Decken's *Reisen in Ost-Afrika*, v. 3, p. 34, and elevated it to specific rank as *Melitta cyanostictus* in 1875, in *Journ. f. Orn.* v. 2k, p. 340. There is not the slightest doubt from the description and distribution (Natal, Loango, and East Africa), given by Cabanis, that his *M. cyanostictus* is the bird which has been mixed up with *M. minutus*=*erythropterus*=*pusillus* by Finsch and Hartlaub (*Vög. Ost-Afrika's*, pp. 188-91), Dresser (*Monogr. Merop.* p. 111) and others, while Sharpe (*Cat. B. Brit. Mus.* v. XVII, p. 43, 1892), who must have misunderstood Cabanis' description, renamed it *M. meridionalis*, applying at the same time the name *M. cyanostictus* to a bird found in Shoa, Somaliland and the coast districts of East Africa to Mombasa, Dar-es-Salaam, Lamu, and Melindi southwards. This species, which is characterized by a broad blue frontal band, connected with an equally broad blue superciliary stripe, has apparently no name, and I have named it

63. *Melittophagus sharpei*,

in honour of our friend Dr. Sharpe, who worked out the *Meropidae* for vol. XVII. of the *Catalogue of Birds* (Type: ♂ ad. The Haud, Somaliland, 22. 7. 1894, Donaldson Smith coll.).

With regard to the synonymy of the *Melittophagus meridionalis* in the *Catalogue of Birds* (recte: *M. cyanostictus* Cab.), I may add that *Merops angolensis* (ex Brisson, *Guêpier d'Angola*) is rightly quoted with a ? as a synonym, the description being quite obscure. On the other hand, *Merops variegatus*, Finsch and Hartlaub, *Vög. Ost-Afrika's*, p. 191, is not correctly quoted under this species, the description leaving no doubt that the authors really described the true *M. variegatus* Vieillot's, while they mixed *M. pusillus* and *cyanostictus* Cab. under their *M. minutus*.

64. *Irrisor jacksoni* Sharpe.

♀ ad. Nairobi (B. E. A.), 29. 1. 1899. "Iris dark brown, feet dark copper-red, bill blood-red, eyelid red."

The adult female differs from the adult male only in the shorter and straighter bill (♂ 40, ♀ 35 mm.), and considerably smaller feet. The greater extension of the green on the head is not a character of the female sex, but probably due to immaturity. (Cf. *Cat. B. Brit. Mus.* v. XVI, p. 21).

Another specimen, adult ♂, was shot on the second day in the Great African Forest from Fort Mbéni, on May 6th, 1899. It agrees in every detail with ♂. *Irrisor jacksoni*, except that the bill is much higher at the base and 45 mm. long. It would be rash to establish a new subspecies without further evidence, but I hardly think that this is typical *I. jacksoni*.

65. *Hirundo senegalensis* L.

♀ ad. Kabuka (Singo), Uganda, 27. 3. 1899. "Iris dark brown." ♀ ad. Great African Forest, fourth day from Fort Béné, 8. 5. 1899. ♂ ad. Ituri River, twentieth day from Fort Béné, 24. 5. 1899.

It would be worth while to measure a series of Senegambian skins and others, in order to find out if there are several subspecies. We have only one bird from Moshi (Wagudugn) from those regions. This has a wing of 155 mm., although it is a ♀. Our other examples measure :

♀ Kabnka wing 141, ♀ African Forest 140, ♂ Ituri River 141, ♂ Unyoro 141, ♀ Unyoro 145 mm. It also seems to me that the Moshi specimen is somewhat paler on the rump.

66. *Hirundo rustica* L.

Two specimens, with the underside rather reddish, were shot at Nakabimba (Torn) on April 2nd, 1899. They were still both moulting their primaries.

67. *Hirundo nigrita* Gray.

♂ ad. and ♀ juv., Bafwazabangi, on the Ituri River, 28. 5. 1899. The young bird is dusky brown, and has the white patch on the throat larger than the adult bird.

68. *Psalidoprocne nitens* Cass.

Kitima, on the Ituri River, 25. 5. 1899.

69. *Melaenornis edolioides* (Swains.).

Fort George and Kikanja, in Torn.

70. *Cassinia frazeri* (Strickl.).

♂ Olinga (Snaheli settlement in the Great African Forest, eighth day from Fort Béni), 12. 5. 1899.

71. *Bradyornis murinus* F. & H.

Karimia (Ussongora), Kichnehu (Torn), April and May.

72. *Tarsiger stellatus orientalis* Fisch. & Rehw.

♂ Nairobi, 30. 1. 1899. (Of. App. to Ansorge's "Under the African Sun," p. 338).

73. *Platystira cyanea* (P. L. S. Müll.).

Kichnehu, Torn, 5. 4. 1899.

74. *Batis puella* Rehw.

Nairobi, Dwangiri in Uganda, Kimbugu in Torn.

75. *Bias musicus* (Vieill.).

♂ ad. Great African Forest, Ituri River, twentieth day from Fort Béni, 24. 5. 1899. "Iris and feet lemon-yellow, bill black."

76. **Elminia longicauda** (Swainson).

Diapanda on the Ituri, Uganda and Unyoro. *Elminia theresita* does not seem to differ at all. Neither Reichenow nor I can see the supposed differences.

77. **Artomyias fuliginosa** J. & E. Verreaux.

♂ ♀ Diapanda, Suaheli settlement in the Great Forest, sixth day's march from Fort Béni, 10. 5. 1899. "Iris greyish brown."

78. **Alseonax pumila** Rehw.

♀ ad. and ♂ pull., Nairobi, 5. 2. 1899. "Iris dark brown, bill and feet black." The pullus is above spotted (like all young flycatchers) with rusty buff, and the feathers of the underside are fringed with blackish brown.

79. **Muscicapa infulata** Hartl.

♂ ad. Lake Varangot in Toru, 16. 4. 1899.

80. **Muscicapa lugens** (Hartl.).

♀ juv. Yanga on the Ituri River, 29. 5. 1899. Tips of wing-coverts rusty brown, edges of secondaries buff.

81. **Muscicapa toruensis** sp. nov.

♀ ad. Fort Gerry, Toru, 9. 4. 1899. Differs from *M. caeruleascens*, its nearest ally, in being much more and uniform grey, not so whitish on the throat and middle of abdomen, in having grey, not white, under wing-coverts, and a larger bill. *Muscicapa nyikensis* Shelley from Nyassaland is much larger, whiter below, and has the lores and forehead white. The latter is almost a *Dioptrornis*. Wing of *M. toruensis* 81, tail 66, culmen from forehead to tip 17.5, from nostrils to tip 9.5 mm. "Iris dark brown, feet black, bill slate-colour with black tip."

82. "**Dioptrornis**" **fischeri** Rehw.

Nairobi, 28. 1. 1899. "Iris and feet chocolate-brown, bill bluish grey with dark grey tips." I do not consider that the genus *Dioptrornis* deserves to be separated generically from *Muscicapa*, there being no structural differences of any importance.

83. **Laniarius aethiopicus major** (Hartl.).

Kaboa (Buekulla) and Mondo in Uganda Proper, March and April 1899. "Iris reddish brown, feet slate-blue, bill black."

84. **Laniarius erythrogaster** (Cretzschm.)

♂ Dwangiri (Singo), Uganda, 28. 3. 1899. Lake Kikorongo (salt lake near Lake Albert Edward), 25. 4. 1899. "Iris straw-yellow."

85. *Dryoscopus angolensis* Hartl. (an subsp. ?)

One *male* from Diapanda in the Great Forest, sixth day from Fort Bèni, 10. 5. 1899, differs from typical *D. angolensis* in the Berlin and British Museums,* in having the crown not so black, but more slate-colour, the back and wing-coverts darker, the roots of the rump-feathers white, not greyish. I cannot, from the single specimen, venture to say whether this is a new form or not.

86. *Telephonus senegalus* (L.).

Fort George, Mokia River, and Kitagwetoa in Toru.

87. *Telephonus minutus* Hartl.

Lake Varangot and Kinyomozi in Toru. "Iris pinkish red."

88. *Lanius excubitorius* Des Mars.

Kichuchu and Butiti in Toru, April 1899. "Iris brown, feet and bill black."

89. *Lanius collaris humeralis* Stanley.

♂ ad. Nairobi, 26. 1. 1899, ♂ ♀ ♀ juv. Nairobi, 26, 27, 29. 1. 1899, ♀ ad. Lake Varangot, 16. 4. 1899.

✓ 90. *Corvultur albicollis* (Lath.).

♂ ad. Fort Gerry, Toru, 14. 4. 1899. "Iris dark brown." The feathers on head and neck are liver-brown, but some sprouting new feathers show that this colouration is merely due to the age of plumage

91. *Dicrurus afer* (Licht. sen.).

♂ ♀ Kikanja in Toru. "Iris blood-red." The ♀ is much smaller than the ♂.

92. *Oriolus larvatus* Licht.

♂ ad. and imm. Kikanja (Toru), 3. 4. 1899. "Iris blood-red." These are large birds and apparently not distinguishable from South African specimens. The wing is about 140 mm. long. *O. rolleti* is evidently merely a smaller northern race of *O. larvatus*, with the wing not more than about 125—129 mm., but two Somaliland skins, collected by Dr. D. Smith, have the wings 133 mm. long. The distribution of the two forms, *O. larvatus larvatus* and *O. larvatus rolleti*, must therefore be worked out in greater detail.

* The former—three from Cameroons—compared for me by Prof. Reichenow; the latter—one single specimen only—by me.

✓ 93. *Oriolus laetior* Sharpe.

♂ ad. Great African Forest, thirteenth day's march from Fort Béni, 22. 5. 1899. "Iris blood-red, feet bluish grey, bill pinkish red." This oriole has been mixed up with *O. brachyrhynchus* for a long time. It differs from the latter, of which I know specimens from Sierra Leone and Liberia only, in the following characters:—The back is lighter yellowish green; the yellow collar wider and more spread over the back, the lesser upper wing-coverts are golden-yellow, not olive-green as in *O. brachyrhynchus*; the tail and wings are lighter and less tinged with olive. Sharpe (in *Bull. B. O. Club*, no. 48, November 1897) described this form as differing from *O. brachyrhynchus* "in being smaller, and having a conspicuous yellow collar, the yellow also being spread over the mantle." The smaller size, however, attributed to this form, is not apparent in the specimens before me. *O. brachyrhynchus* has also a yellow collar, but it is less clear and narrower. *Oriolus laetior* differs from *O. luteatus* and *O. luteatus rolleti* in being smaller, having a smaller white alar speculum, the conspicuous golden yellow shoulder, and in having the outer edges of the secondaries and greater wing-coverts grey. The presence of an alar speculum (the tips of the primary coverts being white), the yellow least wing-coverts and grey edges on the wing, separate *O. laetior* also at once from *O. nigripennis*.

✓ 94. *Lamprocolius glaucovirens* Elliot.

♂ ad. Great African Forest, seventh day's march from Fort Béni, 11. 5. 1899. "Iris almost white with faint yellow tinge: bill and feet black." The head in this species is not steel-blue in any Congo specimen before me, nor on fig. 2 pl. VII *Cat. B. Brit. Mus.* v. XIII. These figures are not very accurate, and do not fully agree with nature, nor with the descriptions (pp. 172, 173). *L. glaucovirens* is very closely allied to the Senegambian *L. splendidus*, and perhaps only subspecifically separable.

95. *Lamprocolius chalybeus* Ehr.

♂ ad. Nairobi, 28. 1. 1899. "Iris light yellow."

96. *Lamprotornis purpuropterus* Rüpp.

Dwangiri (Singo) in Uganda, Karimä in Ussongora, Congo Free State.

97. *Pholidauges verreauxi* Bocage.

♂ ad. Msarosaro, Uganda, 11. 3. 1899.

98. *Buphaga erythroryncha* Stanley.

♂ ♀ Luba's (Usoga), Uganda Protectorate, 9. 3. 1899.

The four skins before me agree fully with the description, except that the *females* do not differ from the *males* except in their smaller size, the wing being about 5 mm. shorter. The birds described as the females by Reichenow (with a whitish belly and under tail-coverts) may possibly be immature. Dr. Ansorge's birds are probably not sexed wrongly, such mistakes occurring very seldom in his collections, and their smaller size makes an error improbable.

99. *Sitagra ocellaria crocata* (Hartl.)

♂ ad. Kitagwetoa in Toru, 6. 4. 1899. "Iris: inner circle greyish-white, outer pale yellow. Feet pale slate-blue, bill black."

100. *Melanopteryx nigerrima* (Vieill.)

Bafwazabangi, on the Ituri River, 28. 5. 1899. "Iris bright lemon-yellow."

101. *Hyphantornis fischeri* (Rehw.)

Fort George, 26. 4. 1899. "Iris dark brown."

102. *Hyphantornis xanthops* Hartl.

Kitagwetoa and Kinyomozi in Toru, April 1899. "Iris pale golden yellow, feet pale brown, bill black."

103. *Hyphantornis castanops* (Shelley).

Kichuchu, Kinyomozi and Butiti in Toru, April 1899. "Iris golden yellow, bill black. feet pale brown."

104. *Hyphantornis abyssinicus* (Gm.)

Typical *males*, not differing from Abyssinian specimens, were procured at Kahangi in Toru, and near Fort George on the Albert Edward Lake. One from Kampala in Uganda has the black slightly more extended towards the nape, and was therefore recorded by me as *H. bohndorffi* Rehw. in Ansorge's "Under the African Sun," p. 343). However, I am now of opinion, that those from Uganda and Unyoro must be called *abyssinicus*, while males from Stanley Falls (type or typical specimens before me) have the black of the crown extended in the middle for about 4 to 8 mm. more backwards. They were named *bohndorffi*, but are merely a slight subspecies of *H. abyssinicus*. Males from Bafwazabangi and other places on the Ituri River are rather more like typical *abyssinicus*, but one or two have the black intermediate in extension between the two forms. This is, of course, not very easy to observe, if the skins are not first-rate; and those before me are not so.

105. "*Ploceus anomalus*" Rehw.

This interesting form is described from a single young bird by Reichenow in the *Journ. f. Orn.* 1887, p. 214. Three young birds, collected by the late Mr. Bonny in the camp of the notorious "Rear-column" at Yambuga, on the Aruwimi River, have been examined by Prof. Reichenow and found to be the same as his *Ploceus anomalus*. All three are evidently immature, two have no black feathers on the throat, while the third, very mutilated one, has a black throat. The first primary is in length between that of a *Hyphantornis* and a *Pyromelana*, and the tail resembles more that of a *Pyromelana*. Unfortunately the adult male is not yet known.

106. *Icteropsis pelzelni* (Hartl.).

♀. Fort George, 27. 4. 1899. "Iris brown."

107. *Drepanoplectes jacksoni* Sharpe.

A good series of this fine bird, described and beautifully figured in the *Ibis*, 1891, p. 246, pl. 5, was obtained at Nairobi on January 31st, 1899. The adult *males* have the "iris dark brown; feet mauve-black; bill light greenish with black near gape and along the edges of the lower bill." ♀ "Iris dark brown; feet light brown; lower brownish grey."

✓ 108. *Penthetria eques* (Hartl.).

Holulu River (tributary of the Semliki), Congo Free State, 2. 5. 1899. ♂ ad.: "Iris dark brown; feet black; bill slate-blue."

109. *Urobrachya phoenicea* (Heugl.).

Banda (Chagwe), in Uganda Proper: Kikauja, in Toru; Holulu River, in the Congo Free State.

✓ 110. *Pyromelana nigrifrons* Böhm.

♂♂. Kasesi, in Toru, and Fort George. "Iris dark brown; feet pale brown; bill black." In both these specimens the chin shows irregular black spots.

111. *Plocepasser melanorhynchus* Rüpp.

♂ ad. and nestling, Campi-ya-Simba, 13. 1. 1899. ♂ ad.: "Iris red-brown," nestling, "Iris dark grey." Colour and markings of the nestling are exactly as in the adult *male*!

112. *Philetaerus arnaudi* Bp.

Campi-ya-Simba, 17. 1. 1899. "Iris red-brown."

✓ 113. *Spermestes stigmatophorus* Rehw.

Tambue, Government station on ferry across Ituri River, twenty-second day in Great African Forest from Fort Béni.

114. *Spermestes fringilloides* (Laf.).

From various places on the Ituri River.

The difference in size between various individuals is remarkable, but it does not seem to be geographically limited. Some specimens from Liberia before me look much darker on the back, but they have been in spirits, although this is not said on the labels.

115. *Lagonostica brunneiceps* Sharpe.

Mondo, in Uganda Proper. (See Ansorge's "Under the African Sun," Appendix, p. 345.)

✓ 116. *Pytelia ansorgei* Hart.

One *male* in a wretched condition—the head smashed—was shot on the Wemi River, in Toru, on April 21st, 1899. The bill is slate-blue, blackish grey towards the tip. The crown (and apparently the head all round) deep black. Hind-neck, breast, abdomen, thighs, and under tail-coverts slaty or ashy grey; back rump and upper tail-coverts golden olive. Quills and upper wing-coverts black with broad edges of greenish olive, thus outwardly appearing greenish olive. Sides of chest golden olive. Under wing-coverts and inner quill-lining white. Tail black, outer rectrices more slate-colour. "Iris and feet dark brown." Wing 51, tail 40, metatarsus 12, bill 9 mm. (*Bull. B. O. Club*, December 1899).

117. *Nigrita canicapilla sparsinguttata* Rehw.

Kichuchui, in Toru, 5. 4. 1899. "Iris ochre-yellow."

This form, differing from *N. canicapilla canicapilla* only by the lesser number of spots on the wing, which are restricted to the smaller series of wing-coverts, can only be regarded as a geographical race of the latter.

118. *Symplectes reichenowi* Fischer.

♂ ♀ ad. Nairobi, 30. 1. 1899. "Iris in both sexes yellow; feet light brown; bill black."

✓ 119. *Symplectes stuhlmanni* Rehw. (*Orn. Monatsber.* v. 1. p. 29 (1893).

Kawelli (Buekulla), in Uganda; Kitagwetoa, in Toru; Masindi, in Unyoro. "Iris in the male ochre, in the female light yellow; bill slaty black; feet pale brown."

120. *Passer motitensis rufocinctus* Fisch. & Rehw.

♂ ♀. Nairobi, 27. 1. 1899. "Iris straw-yellow; feet dark grey with a slaty tinge, bill deep grey, almost black."

It is evident that *P. rufocinctus* and *shellegi* are only geographical forms of the same group as *motitensis*. They may be compared as follows:—

a. *Passer motitensis motitensis* A. Smith.

1849, A. Smith, *Illustr. Zool. S. Afr.* pl. 111; 1888, Sharpe, *Cat. B. Brit. Mus.* v. XVI. p. 324

Larger, wing 88 mm., bill very thick and high, about 12 mm. long, sides of head almost white (S. Africa).

b. *Passer motitensis rufocinctus* Fisch. & Rehw.

1884, *Journ. f. Orn.* p. 55; 1891, Sharpe, *Ibis* p. 256.

A little smaller, wing 78 mm., bill equally long, but much less high, sides of head grey (Masailand).

c. *Passer motitensis shelleyi* Sharpe.

1891, *Ibis* p. 256 : *P. motitensis* Henglin and Brehm (non Smith!).

Smaller and paler than forms *a* and *b*, wing 74 mm.; bill short and thick, about 10 mm. long; sides of head white as in *P. motitensis motitensis*. The black patch behind the ear-coverts is present, more or less, in all the three forms, but it is more conspicuous and larger in *P. m. shelleyi*. Kordofan (Melpesz, Brehm. coll.) and Lado (Emin coll.).

121. *Serinus* (an potius *Crithagra*) *albifrons* Sharpe.

1891, *Ibis* pp. 118, 255.

♂. Nairobi, 30. 1. 1899. "Iris and feet light brown; bill brownish grey; lower bill greyish white." This specimen agrees with Dr. Sharpe's description, but it has five white feathers on the crown.

122. *Fringillaria tahapisi* (A. Smith).

♂ ♀. Fort George, on Lake Albert Edward. 29. 4. 1899. "Iris dark brown."

123. *Passer diffusus gongonensis* Oust.

Nairobi. "Iris sepia; feet pale brown; bill black."

This is a distinct subspecies of *Passer diffusus*, nearest to the form to be called *P. diffusus swainsoni*. It is best diagnosed as follows:

Formae "*Passer diffusus swainsoni*" nominandae colore simillimus, sed differt magnitudine ingente, rostro altiore, alis longioribus. Altit. rostr. 10—11 mm., al. 90—95 mm.

Hab. Gongoni, Witu, Lamu, Nairobi, in Africa orientali. In 1890 Dr. Oustalet described this form as the representative of a new genus in the *Naturliste*, calling it *Pseudostruthus gongonensis*. He diagnosed the genus and species as follows:

"*Pseudostruthus*, novum genus ex familia *Ploceidarum*, rostro crassiore a generi *Ploceipasserum* diversum."

"*Pseudostruthus gongonensis*, nova species *Passeri diffusi* coloribus simillimus, sed rostro multo crassiore alisque longioribus valde diversus."

A detailed description is then added, which leaves no doubt that this form is meant.

While Oustalet created a new genus of the family *Ploceidae* for this sparrow, which, it must be said again, does not agree with *Passer diffusus*, but with *swainsoni*, Berlepsch enumerated it as *P. swainsoni* in the list of Witu and Lamu birds in *Abhandl. Senckenb. Nat. Ges.* vol. XXI. pp. 481, 483, calling, however, attention to the enormous size of these specimens, and British ornithologists have not separated it from *P. d. swainsoni*. Although I am decidedly of the opinion that this form must be separated from *P. d. swainsoni*, I cannot consider it to be more than a subspecies or geographical race of the latter, and I regard it as most unfortunate that in ornithology the larger size and higher culmen of a bird is ever thought to be sufficient for a new genus, while the entire similarity in colours is deliberately disregarded.

I am grateful to my friend Dr. Sharpe, who called my attention to Professor Onstaelet's description of *Pseudostruthus*, or I would most likely have given a new subspecific name to this large form of African sparrows.

I must add that *Passer swainsoni*, differing only in its dark ashy grey sides of the head and crown, its rather grey underside and less whitish throat and abdomen from *diffusus*, must be united with the *diffusus* group, and kept as a subspecies of the latter. For those who make bold to separate *swainsoni* and *diffusus* specifically, *Passer gonyonensis* will also be a species in their sense, being the most distinct of all these forms.

124. *Passer diffusus ugandae* Rehw.

♂ Kaboa (Buekulla), Uganda, ♂ ♀ Fort George, Torn, end of April, Kitima, Government station on the Ituri River, twenty-first day from Fort Béni, in Great African Forest, 25. 5. 1899, ♂ Bafwazabangi, on the Ituri River, 25. 5. 1899. All these specimens seem to belong to exactly the same form, and, if separable from typical *P. diffusus*, must be called *P. diffusus ugandae* Rehw. This form has been separated by Professor Reichenow in *Orn. Monatsber.*, v. VII. p. 199 (December 1899), on account of its red-brown back which approaches the colouration of the rump, and its very long wings: measurements of the latter are not given. The length of the wing I cannot fully appreciate. The wings of sixteen skins from Uganda, Unyoro, Torn, and the Upper Congo region have the wings 78 to 85 in length: six from Natal about 80 to 82: one from Nyassaland 86 mm. The more reddish brown back, however, of the Central African birds is distinctly visible, if compared with the (typical) South African birds.

On the same page Professor Reichenow names the specimens from Mangu in the Togo Hinterland *Passer diffusus thierryi*, in honour of the energetic collector, Lieutenant Thierry. He informs us that they are strikingly pale on the upperside. This I find to be the case in some Senegambian skins in the Tring Museum, and they seem also to be smaller, the wings measuring only 79 to 81 mm. The fauna of Senegambia agreeing with the Mangu fauna, the Senegambian (and Mangu) form must, I think, bear the name *Passer diffusus gularis* Lesson, 1839. It remains to be found out whether there is again a darker-coloured race in the forest region of West Africa. I have before me, in the Tring Museum, a *male* brought to England by a palm-oil ship from the West Coast, and one collected by Ussher in Fautee. Both have the wings long (83 and 84 mm.), and the former appears very deep red on the back. Perhaps the sparrow collected by me at Loko on the Benué, and a series of Niger skins, can throw a light on this question. If they are different they would have to bear the name *occidentalis* of Shelley, under which I recorded them in the *Journ. f. Orn.* for 1886 p. 584.

We would then have in Africa the following forms of sparrows of this group:—

1. *Passer diffusus diffusus*: South Africa. Back rather ashy brown, in sharp contrast to the rump. Generally large.

2. *P. diffusus ugandae*: Central Africa (Uganda to Congo). Back rufous, not in such a sharp contrast to the rump (? smaller than No. 1).

3. *P. diffusus occidentalis*: West African forest region. Deep rufous brown above. Wings rather long. *This form is possibly not separable from P. d. ugandae*, which then would have to be called *occidentalis*.

4. *P. diffusus gularis*: Senegambian region to Niger, as far as the "Steppen-gebiet" reaches, and Lado (Emin). Paler above, wing rather short. (Synonym *P. d. thieryi*.)

5. *P. diffusus swainsoni*: North-East Africa. Darker grey on the underside; throat and abdomen less whitish. Rather large.

6. *P. diffusus gongonensis*: Gongoni, Witn, Lamu, Nairobi, in East Africa. Like *P. d. swainsoni*, but with enormous bill and long wings.

125. *Anthus pyrrhonotus* (Vieill.).

♀ ad. Fort George, Toru, 28. 4. 1899. (Cf. *Cat. B. Brit. Mus.* X, p. 555.)

126. *Anthus rufulus cinnamomeus* Rüpp.

Nairobi and Fort George, common.

I have named this bird as above, since I am not fully convinced that the Indian and African forms are quite the same. The latter seems to be more brownish above and the legs lighter (yellowish brown according to Dr. Ansorge's labels). I am convinced that Vieillot's name *rufulus* refers to the Indian form of this pipit, and that the name *rufulus* therefore cannot stand for the *Certhilanda*, to which it is likewise applied in the *Cat. B. Brit. Mus.* This latter will have to be called *Certhilanda albobasciata* Lafr. (Cf. *Cat. B.* X, p. 574 and XIII, p. 515.)

127. *Motacilla flava* L.

♂ ad. Luba's (Usoga), Uganda Protectorate, 9. 3. 1899, ♀ Fort Gerry, 10. 4. 1899.

128. *Mirafra africana* (A. Smith).

This lark must be divided into four geographical representative forms, according to the present state of my knowledge.

a. *Mirafra africana africana* (A. Smith).

South Africa, evidently south of the great mountain range. Wing in males 96—102, females 94 mm. Colouration as described in detail by Sharpe in *Cat. B. Brit. Mus.* XIII, p. 608.

b. *Mirafra africana transvaalensis* subsp. nov.

Transvaal. Wing in males 96—98, females 87 mm. Bill and feet smaller, colouration more rufous, the rufous colour on the crown not confined to the nape, but reaching almost to the forehead. (Cf. *Cat. B. Brit. Mus.* XIII, p. 608 note.) (Type from Rustenburg.)

c. *Mirafra africana tropicalis* subsp. nov.

Tropical East Africa to Lake districts and Uganda. Size of *M. a. africana*, but the markings bolder, the black centres to the feathers larger and more defined, generally more rufous brown and less ashy.

I am unacquainted with specimens from the West Coast, where *M. africana* is said to occur from Cunene River to Gaboon.

d. Mirafra africana athi subsp. nov.

Athi Plain, British East Africa, 24. and 25. 1. 1899. This magnificent form is much more distinct than forms *b* and *c*, and most ornithologists would probably call it a "good species." It differs at a glance from the other forms by its much paler and more greyish general appearance. The wing-coverts are not rufous, but greyish-brown with black ante-apical patches. The feathers of the upperside are black with wide whitish-brown borders, the head much lighter than in the allied forms, the nape not conspicuously rufous, the superciliary stripe almost white and very conspicuous, the throat white, the size perhaps a little smaller; wing in one male 101, in the females 95—96 mm. Under wing-coverts and wing-lining much paler than in the other forms, the under tail-coverts very pale isabelline, nearly white. "Iris orange golden, feet flesh-colour, upper bill dark grey, lower yellowish grey."

A young bird, Nairobi, 31. 1. 1899, evidently belongs to this same form. It is much more blackish, the crown of the head almost black, the feathers of the upperside and wing-coverts are blackish brown with sharply limited whitish edges. The spots on the crop-region are larger than in the adult bird, the rectrices, as usual in young larks, are narrower and somewhat pointed. "The iris was brown, feet light brown."

129. *Mirafra fischeri* (Rehw.)

♂ ad. Kitagwetoa in Torn, 6. 4. 1899. "Iris dark brown, feet pale brown, upper bill dark, lower pale grey." Specimens of this lark are in the Tring Museum now from Ussimbiro, Fadjuli (Emin Pasha coll.), Dar-es-Salaam (collector unknown), Mombasa (Kretschmer coll.), and Samburu, four days from Mombasa (Ansorge coll.).

130. *Mirafra rufocinnamomea* (Salvad.) (an *torrida*?)

♂ ad. Campi-ya-Simba, 11. 1. 1899. "Iris sepia, feet light brown. Upper bill dark grey, lower light grey."

Sharpe has identified Shelley's *Mirafra torrida* from Ugogo with Salvadori's *M. rufocinnamomea* from Abyssinia, and Professor Reichenow has kindly named the specimen in question as *M. rufocinnamomea*, thus evidently agreeing with Dr. Sharpe. It is, of course, quite possible that both forms cannot be separated, but a series from the various places should be compared. As it is, the rufous form before me is apparently only a rufous subspecies of *M. fischeri*, from which it differs only in the very much more rufous colouration everywhere. In the description of the type by Henglin I do not see the cross-markings mentioned which are so characteristic to the upperside of *M. fischeri fischeri* and its rufous subspecies. The latter is probably the desert form. (Cf. *P. Z. S.* 1882 pl. XVII. (very bad figure), *Cat. B. Brit. Mus.* XIII. p. 600.)

131. *Mirafra intercedens* Rehw.

Shot at Campi-ya-Simba on the same day as the preceding species, and was therefore on the label marked as the female of the latter. This, however, is erroneous, the two species being perfectly distinct. Colour of iris sepia, feet and bill as in the preceding species.

132. *Tephrocorys cinerea* (Gm.).

I am not a little puzzled by two *males* of a lark shot in the Athi Plain, British East Africa, on January 25th, 1899, and which, as far as I can see, do not differ from South African *T. cinerea*, of which I have a good series to compare. It may be that the patch on the sides of the neck is rather dark. The wings measure 93 and 94 mm.

This species consists, in my opinion, of a number of races, or geographical representatives.*

a. Tephrocorys cinerea cinerea (Gm.).

South Africa. (Two from Athi Plain apparently not separable ! ?) Outer web of two outer rectrices margined with white. Nape not sharply streaked with black.

b. Tephrocorys cinerea spleniata (Strickl.)

N. Damaraland to Benguela. Like *a*, but paler.

c. Tephrocorys cinerea anderssoni (Tristr.)

Damaraland. Like *a*, but more rufous on the sides, outer web of outermost rectrix fulvescent, that of second not different from the rest.

d. Tephrocorys cinerea ruficeps (Rüpp.)

N.E. Africa. Spots on sides of neck blackish, sides and tail as in *c*; nape sharply streaked with black.

133. *Pycnonotus nigricans minor* Hengl.

Kimbugu, Kinyomozzi, Great African Forest, nineteenth day from Fort Béni, 23. 5. 1899, and Bafwazabangi, on the Ituri River, 28. 5. 1899.

134. *Andropadus gracilis* Cab.

♀ Kitima, Government station on the Ituri River, twenty-first day's march from Fort Béni. In the *Cat. B. Brit. Mus.* v. VI, p. 115 this species is placed in *Chlorocichla* in Shelley's list of African birds under *Criniger*. I fail to see generic differences from *Andropadus*, and I doubt the generic distinctness of several of these genera. "Iris red."

135. *Andropadus eugenius* Rehw. (?).

One *male*, shot in Great African Forest on the fifth day's march from Fort Béni, agrees with a specimen from Eldoma Ravine (♀), except that the middle of the abdomen is light yellow, the sides of the throat still more brilliant yellow, the wing a little shorter (83 mm.). The specimen has not the appearance of a young bird, but Dr. Ansorge has marked it: "♂ young. Iris dark grey; feet yellowish-brown; bill dark greenish-brown." More specimens are necessary to decide whether this bird is exactly the same as *A. eugenius* or not.

* Cf. *Cat. B. Brit. Mus.* XIII, p. 561 (Sharpe).

136. *Andropadus virens* (Cass.)

♀. Great African Forest, fifth day's march from Fort Béni, 9. 5. 1899.
♂. Great African Forest, Kitima, Government station on the Ituri River. "Iris dark grey."

137. *Criniger flavigula* (Cab.)

♂ ♀. Kielnehn in Toru, 5. 4. 1899. ♂. "Iris old gold, feet greenish brown, bill black." ♀. "Iris brown-ochre on inner circle, grey-brown on outer. Feet greenish-grey; bill blackish." The ♀ is much smaller than the *male*.

138. *Criniger tricolor* (Cass.)

♂. Great African Forest, eleventh day's march from Fort Béni, 15. 5. 1899.
"Iris ochre-grey."

139. *Xenocichla hypoxantha* Sharpe.

♂ ad. Fort Gerry, Toru, 9. 4. 1899.

140. *Phyllostrephus flaviventris mombasae* Shell.

♂ ad. Makindos River, 4. 11. 1896, agrees fully with typical *mombasae*, except that the wing is slightly longer, measuring 113 mm.

141. *Turdinus albipectus* Rehw.

♂ ♀. Fourth and eighth day in Great African Forest, May 8th and 12th, 1899.
"Iris ♂ red-brown, ♀ greyish-ochre; feet bluish-grey; upper bill slate-colour, lower pale bluish-grey." ♂ wing 74 mm., ♀ wing 68 mm.

142. *Bradypterus apicalis* (Cab.)

♂ ♂. Kaboa in Uganda, Kikanja in Toru. "Iris pale ochre."

143. *Cisticola rufopileata* Rehw.

♂. Warri, Lower Niger, 11. 10. 1897. "Iris light brown; feet whitish; bill black." (Felix Roth. coll.). This is the bird erroneously called *C. ruficapilla* in *Cat. B.* VII. p. 248. If, however, the rufous outer aspect of the quills is the only difference between *C. cinerascens* and *C. rufopileata*, and their areas are not separate, I cannot help doubting their specific distinctness.

144. *Cisticola chubbi* Sharpe.

♂. Kitagwetoa in Toru, 6. 4. 1899. "Iris pale ochre; feet flesh-colour."

145. *Cisticola cinerascens* Hengl.

Karimia, 1. 5. 1899. "Iris gold-brown; feet pale brown; upper bill dark blackish-grey, lower light grey, darker towards the cutting-edge."

146. *Cisticola strangei* (Fras.)

♂ ad. Galabi in Uganda, Kasesi in Toru, March and April 1899. "Iris ochre."

147. *Cisticola erythrogenys* Rüpp.

Nairobi, January 1899. "Iris reddish brown."

148. *Cisticola hindei* Sharpe.

A series from Nairobi, shot in the last days of January and the first days of February 1899, are much lighter and paler, and the rump and upper tail-coverts are more heavily patched with black, than in *C. cisticola*. They agree fully with the types of *C. hindei*. This form is evidently a light form of *C. cisticola*. The plate of *C. hindei* in the *Ibis* for 1898 does not give an idea of its pale colouration.

149. *Erythropygia hartlaubi* Rehw.

Fort Gerry and Nakabimba in Toru, April 1899. "Iris dark brown; feet slate-grey." The nestling is above deep brown, spotted with pale rufous brown, each feather being pale rufous brown, widely edged with blackish brown.

150. *Euprinodes* (? an potius *Apalis*) *flavocincta* Sharpe.

♀ ad. Nairobi, 5. 2. 1899.

151. *Camaroptera griseoviridis* (v. Müll.)

♂ ad. River Lubilia (one day's march westward from Lake Albert Edward), Ussongora 30. 4. 1899. "Iris of the colour of old gold; feet yellowish-brown; bill dark grey."

152. *Crateropus kirki* Sharpe.

♂♂ ad. Karimia (Ussongora), 1. 5. 1899. "Iris orange-yellow, shading into lemon-yellow towards inner edge; feet steel-grey; bill black."

153. *Crateropus sharpei* Rehw.

♀ ad. Kitagwetoa in Toru, 6. 4. 1899. "Iris: inner circle whitish-yellow, shading into whitish-grey towards the outer circle; feet dark grey with a faint purple tinge; bill black."

154. *Zosterops stuhlmanni* Rehw.

♀♀. Kikanja in Toru, 3. 4. 1899. "Iris pale ochre." These two specimens have been compared by Professor Reichenow with the type of the species.

155. *Nectarinia kilimensis* Shelley.

Kampala in Uganda; Butiti, Lubona, and Kahangi in Toru, March and April 1899. "Iris dark brown; bill and feet black." *N. filiola* Hartl. is the same. The supposed more reddish shcen of one of these supposed forms is quite variable. Specimens of *N. kilimensis* in the British Museum and some named for me by Reichenow, do not differ from the typical series of *N. filiola* collected by Emin Pasha.

156. *Cinnyris erythroceria* (Hartl.).

Fort George and Fort Gerry, in Toru. "Iris dark brown." Adult males with central rectrices fully 20 mm. longer.

157. *Cinnyris cuprea* (Shaw).

Kawelli and Mubende in Buekulla; Galabi in Singo, Uganda. "Iris dark brown."

158. *Cinnyris verticalis viridisplendens* Rehw.

Kaboa (Buekulla), I. 4. 1899, Fort Gerry, Toru. 9. 4. 1899. The female has the wing 7 mm. shorter than the adult male.

159. *Cinnyris eboensis* (Jard.).

1343, *Nectarinia eboensis*, Jardine, in *Naturalists' Library*, v. xvi. *Sunbirds*, p. 244; *ibidem* pl. 30 and p. 25 f. under the name of *N. adelberti*; 1889, *Cinnyris castaneiventris*, Madarasz in *Ornis* v. V. p. 149, pl.

The *male* differs from *C. adelberti* as follows: The wing-coverts are uniform deep olive-brown, not rufous fawn-colour; the abdomen is chocolate-brown or very nearly "burnt umber," not chestnut. The hindneck and back are not so black; the throat is paler; the crown is of a slightly more bluish, not so yellowish green.

The type of *Nectarinia eboensis* is still in the British Museum, where it was apparently not noticed by the author of vol. IX. of the *Cat. B. Brit. Mus.* This is the sole representative of the species in the British Museum. A friend of mine suggested (in litt.) that both *C. adelberti* and *C. eboensis* might have been found by Shelley on the Gold Coast, as that ornithologist mentions specimens with light and dark wings; but I have examined these specimens and found them all to be typical *C. adelberti* in more or less faded and worn plumage. We have thus two species of subspecies: *C. adelberti* from the Gambia to the Gold Coast, *C. eboensis* from the Niger to the Congo. I have examined forty specimens of *C. adelberti* and seven of *C. eboensis*, sent by Dr. Felix Roth from Warri in the Niger Coast Protectorate, while Prof. Reichenow tells me that he has it from the Congo. It is strange that Dr. von Madarasz redescribed *C. eboensis*, without even referring to the name *eboensis*.

160. *Cinnyris acik aequatorialis* Rehw.

According to the measurements given by Reichenow (in *Orn. Monber.* 1899 p. 171) the specimens from Kitagwetoa (Toru), Butiti (Toru), Fort George (Toru), Kahangi (Toru), and those recorded from Masindi, in Unyoro, in Ansorge's *Under the African Sun* p. 351, would all belong to the subspecies which he describes as a species (!) from Bukoba and the Sesse Islands. This form cannot be considered to be more than a subspecies, the differences in the size of the wings, tail and bill not amounting to more than 3 or 4 mm., and other differences not being apparent, and the two forms replacing each other.

On the same page (171) Prof. Reichenow also separates the southern (larger)

* It is curious that this work, which should be correctly quoted as above, is persistently quoted as *Monograph of Sunbirds*, a title which does not exist.

and the northern (smaller—East African) forms of *C. gutturalis*, calling that from East Africa *C. gutturalis*, that from Damaraland *C. gutturalis damarensis*. The difference in the size of these two forms is apparently larger than that of *C. acik acik* and *C. a. aequatorialis*, the wing being 75—58 in the southern, 71—72 in the northern form. Prof. Reichenow's name *damarensis*, however, cannot be used, as I have already (Ansorge's *Under the Afr. Sun* p. 351) named the East African small form *C. gutturalis inaeestimata*, restricting the name *gutturalis* to the large southern form. As Linnaeus did not give the exact locality, his species being taken from Brisson's *Grimpereau noirastre de Brésil*, and this name being afterwards used for southern birds, I, as the first author, who discussed the forms, had the right to restrict the first name *gutturalis* to any one of them, and it seemed to me more natural to apply it to the southern larger form.

A third closely allied form is *C. gutt. saturator* Rehw. from Angola.

161. *Cinnyris chloropygia orphogaster* Rehw.

♂ ad. Mohalla and Kitima, Great African Forest, on the Ituri River, 12th and 21st day from Fort Béné.

In no. 12 of vol. VII (1899) *Orn. Monber*. Prof. Reichenow has published the results of a careful study of the forms of *Cinnyris chloropygia* auct., as far as material was available to him. Mr. Rothschild and I have gone over the series in the Tring Museum, and we found that it fully bears out the conclusions arrived at by Prof. Reichenow. We have the following specimens of the three forms recognized by Prof. Reichenow.

a. Cinnyris chloropygia chloropygia Jard.

Liberia (Robertsport), Demery coll., 3 ♂, 3 ♀; Warri in the Niger Coast Protectorate, Felix Roth coll., 5 ♂, 3 ♀; Sierra Leone (Clements and Hogg coll.), 3 ♂. Reichenow says: Gold Coast, Niger.

b. Cinnyris chloropygia orphogaster Rehw.

Djanda and Uvamba (Emin Pasha coll.), 2 ♂; Ituri River (Ansorge coll.), 2 ♂. Reichenow says: Mittel-Africa (Bukoba, Soweih I., Sesse Is., Sotik). (The Kitima specimen seems to approach *C. c. lühderi* a little.)

c. Cinnyris chloropygia lühderi Rehw.

Léopoldville and Stanley Falls, Congo (Bohndorff coll.); Arawimi River (Camp of Rear-Column), Bonny coll. Reichenow says: Kamerun, Gabun, Loango.

The differences stated by Reichenow are easily recognizable, especially the typical form with its very short wing and pale abdomen is very distinct. There is, however, a mistake in Reichenow's "key," the measurements of the two groups under no. 2 being given as over 50 and under 50 mm., while it should clearly be—as evident from the measurements given under no. 3—over and under 56 or 60 mm.

162. *Parus niger* Bonn. & Vieill.

Karimia, 1. 5. 1899. "Iris dark brown."

163. *Cossypha heuglini* Hartl.

♂ ad. Kitagwetoa in Torn, 6. 4. 1899. "Iris chocolate-brown. Feet purplish brown. Bill black." This specimen has a white frontal band of 3 to 4 mm. I have not found this in any specimen in Tring and London.

164. *Cossypha subrufescens* Boc.

Nairobi, 5. 2. 1899. "Iris dark brown, feet and bill black." I follow Sharpe, Reichenow, and Shelley in identifying the East African birds with *C. subrufescens* of Bocage, but I have not been able to compare specimens.

165. *Myrmecocichla nigra* (Vieill.)

♂ ad. Kichuchu in Torn, 5. 4. 1899. "Iris dark brown." The birds without white on throat and crown—black all over with only a large white shoulder-patch—must be called by Vieillot's name *nigra*, based on Levaillant's Traquet Commandeur. *M. arnotti* is a totally different species.

Professor Reichenow considers the totally blackish birds without white shoulder-patch also to be *M. nigra*. We have got some from Uganda and Karimia. If they really are *M. nigra*, then it is curious that they are all brownish, not pure black, while those with the white shoulders are all deep glossy black. The latter are in fresh plumage, while the brown ones—although shot in the same month—are worn, but it is strange that this state of plumage is the same in all of them, and that in our good series there are no transitional examples.

166. *Myrmecocichla cryptoleuca* Sharpe.

♂♂ Nairobi, 1. 2. 1899. "Iris brown."

167. *Myrmecocichla subrufipennis* Rehw.

♂ ad. Kinyomozi in Torn, 4. 4. 1899. "Iris brown. Bill and feet black."

168. *Saxicola pleschanka* (Lepech.)

Nairobi, 27, 29, 30. 1. 1899.

169. *Saxicola isabellina* Cretzschm.

Nairobi, 29. 1. 1899. Campi-ya-Simba, 11. 1. 1899.

170. *Pratincola rubetra* (L.)

Uganda Proper, March 1899.

171. *Pratincola axillaris* Shelley.

From Kiwalogoma (Chagwe), Lake Varangot in Torn, and Fort Gerry in Torn, we have received specimens which fully agree with the typical series of *Pratincola emmae* Hartlaub, but Professor Reichenow unites *P. axillaris* and *P. emmae*.

172. *Turdus pelios saturatus* (Cab.)

Saint Emma (Busiro) in Uganda, 23. 3. 1899; Kabangi and Butiti in Toru, 7 and 8. 4. 1899; Fort George on Lake Albert Edward, 29. 4. 1899.

I believe that these four Thrushes are *saturatus*, and that also the specimens from Unyoro which I recorded as *Turdus bocagei* in the Appendix to Ansorge's "Under the African Sun," p. 354, belong to *saturatus*. They seem to differ very little from typical *T. pelios* from North-East Africa, but the wings are said to be shorter, and it seems that the rust-colour on the sides is less extended, while the chest and upperside are equally dark or darker. If this form is separable it can only stand as a subspecies. We have thus :—

1. *Turdus pelios pelios*. Large, with much rust-colour on the sides, brownish chest; N.E. Africa.

2. *T. pelios saturatus* (Cab.) A little smaller, the rust-colour less extended, at least as dark or darker above and on the chest; W. African forest-region to Uganda.

3. *T. pelios chiquancoides* Seeb. Without or with very little rust-colour on the sides, chest paler. Senegambia, probably to Niger district, but birds from there are perhaps slightly intermediate.

4. *T. pelios bocagei* (Cab.). A little larger than 2 and 3, as large as 1, chest more or less rufous. Angola (cf. *Cab. J. f. O.* 1882 p. 320, Sharpe in Seebold's *Monogr. Turdidae*, part VII.).

A series of Thrushes of this group in the Tring Museum from Grand Cape Mount, Liberia, labelled by Dr. Büttikofer, differ remarkably in their deep colouration and a very different rufous rust-colour under the wings. No one would hesitate to separate this form (which by the extent of rust-colour is clearly *chiquancoides*), on account of its singular colouration as a new subspecies, if it was not for the fact that they have been in spirits and are skinned in Leyden. No remark to this effect, however, is on the labels! Unfortunately many hundreds of such skins which have been in spirits have been sold to various Museums in Europe, where they were accepted in good faith, without an idea that they had been in alcohol. **The greatest caution must therefore be used with regard to all Liberian skins in judging their colour**, and it is to be feared that *Xenocichla harterti* Reichenow (Nov. Zool. 1895, p. 60) is the first and probably not the last mistake which resulted from such specimens. It is well that every ornithologist should be aware of the history of these Liberian skins.
